

FIG.1

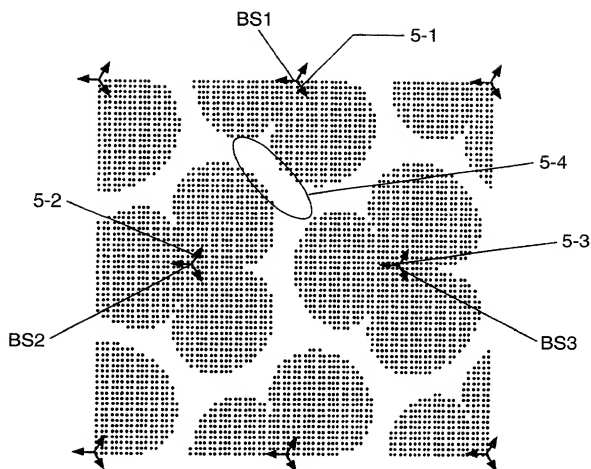


FIG.3

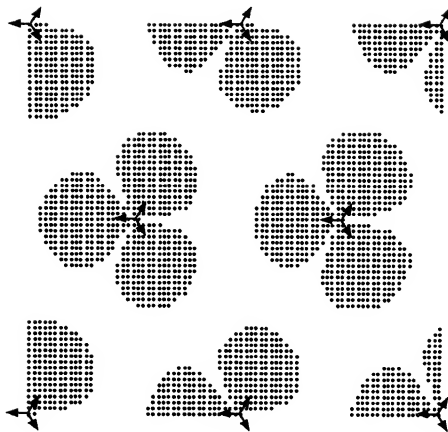


FIG.4

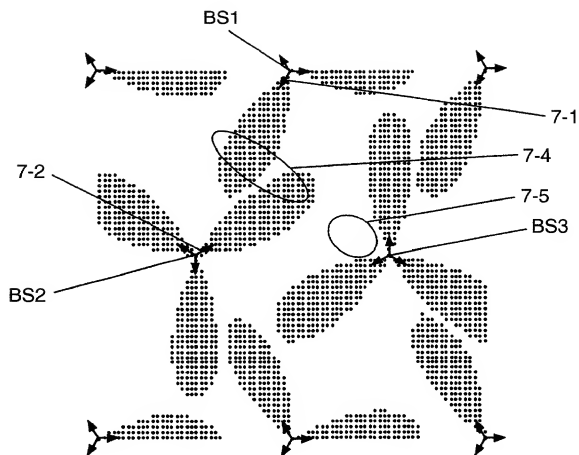
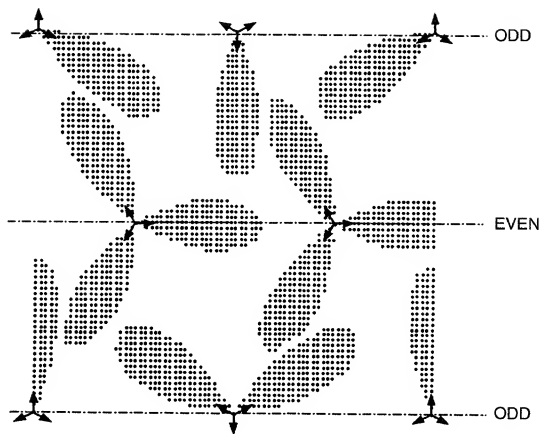


FIG.5



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FIG.7

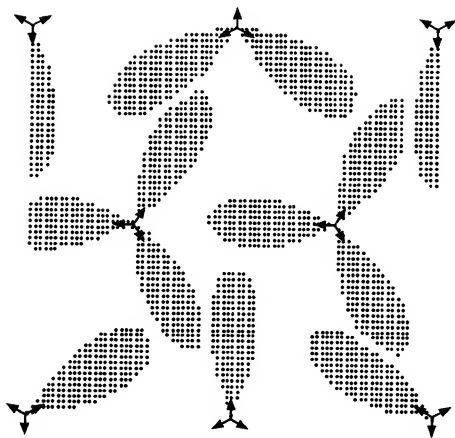


FIG.8

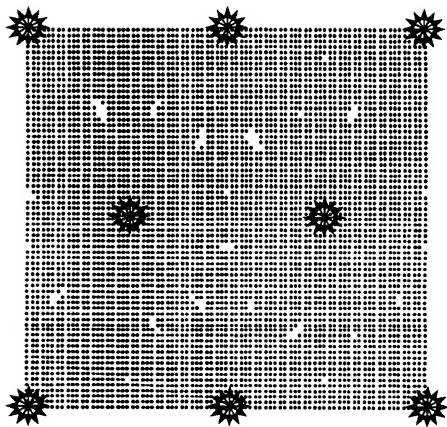
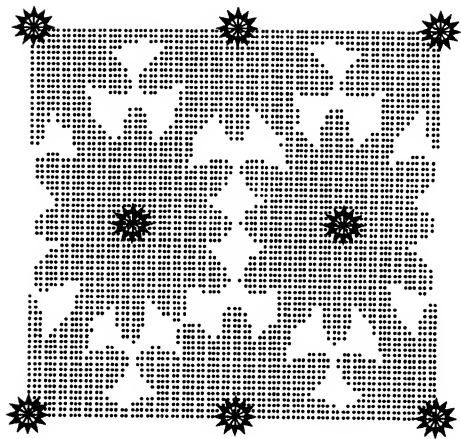


FIG.9



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FIG.10

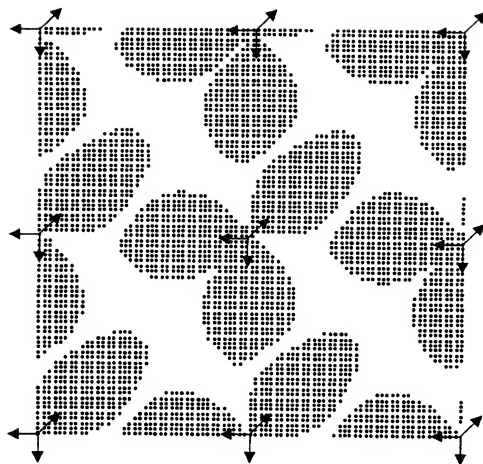


FIG.11

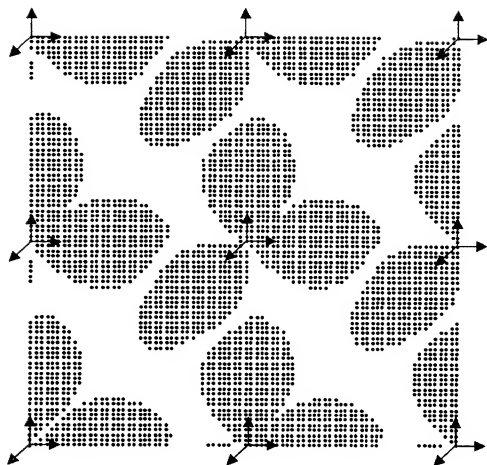


FIG. 11

FIG.12

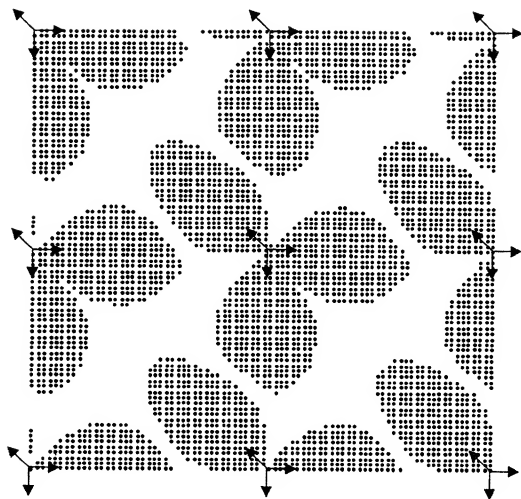


FIG.13

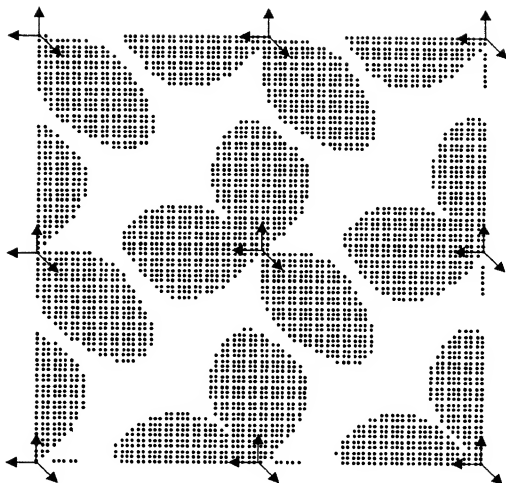


FIG.14

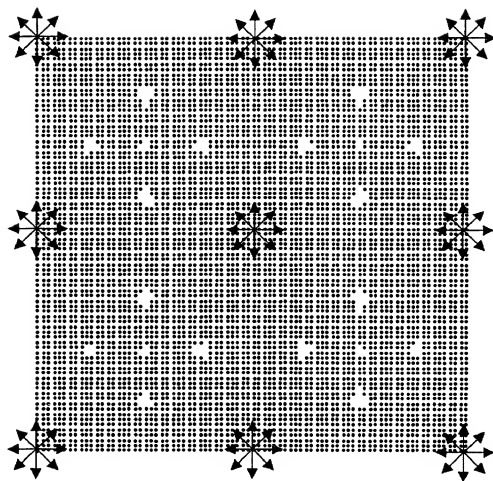


FIG. 15

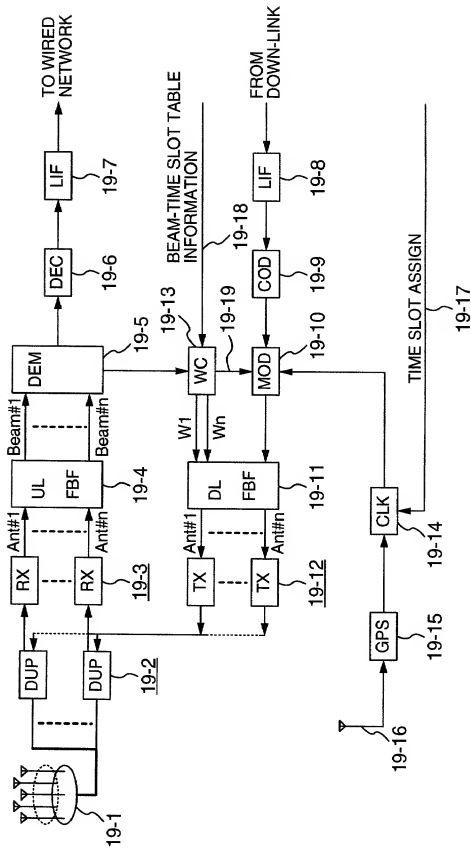
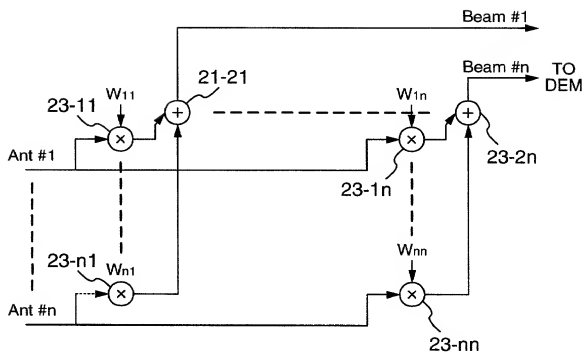


FIG.16



$$\begin{bmatrix} \text{Beam \#1} \\ \vdots \\ \text{Beam \#n} \end{bmatrix} = \begin{bmatrix} W_{11} & \cdots & W_{n1} \\ \vdots & & \vdots \\ W_{1n} & & W_{nn} \end{bmatrix} \begin{bmatrix} \text{Ant \#1} \\ \vdots \\ \text{Ant \#n} \end{bmatrix}$$

FIG. 17

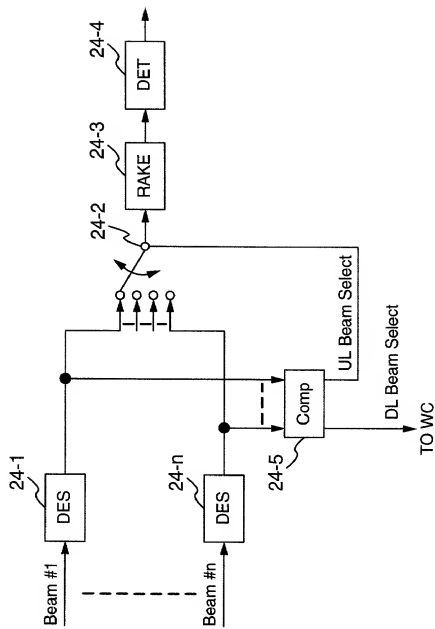


FIG.18

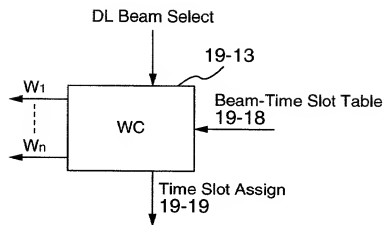


FIG.19

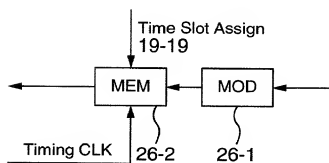


FIG.20

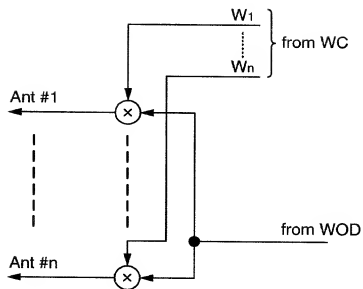


FIG.21

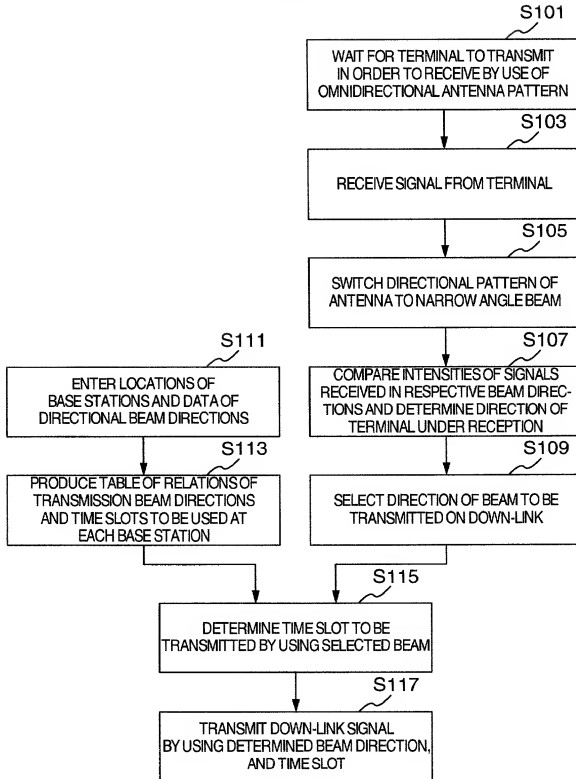


FIG. 22

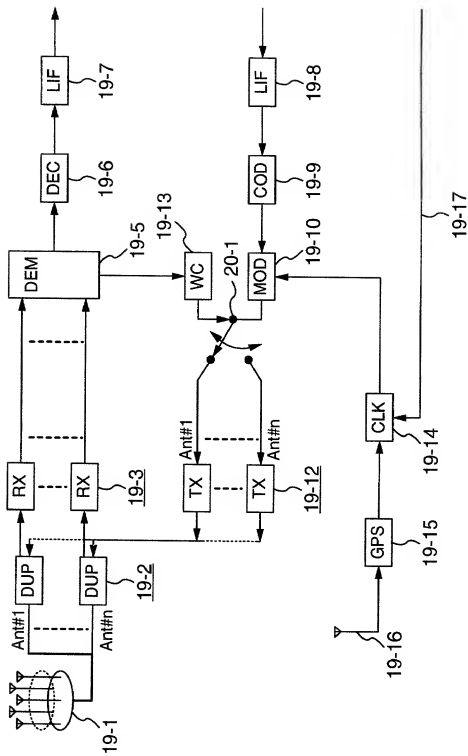
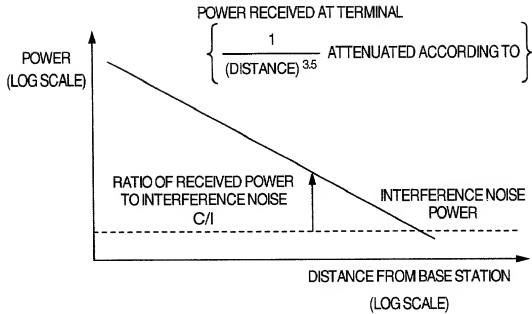


FIG.23



| DISTANCE FROM BASE STATION | NEAR | MEDIUM | FAR |
|----------------------------------|----------------------|----------------------|----------------------------|
| C/I | LARGE | MEDIUM | SMALL |
| MODULATION SYSTEM | 8 - LEVEL MODULATION | 4 - LEVEL MODULATION | REDUCED - LEVEL MODULATION |
| REDUNDANCE OF ERROR CORRECTION | SMALL | MEDIUM | LARGE |
| INSTANTANEOUS TRANSMISSION SPEED | HIGH | MEDIUM | LOW |

FIG.24

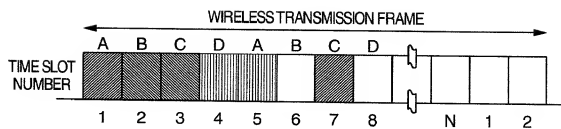


FIG.25

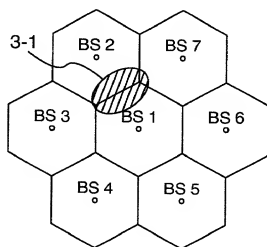


FIG.26

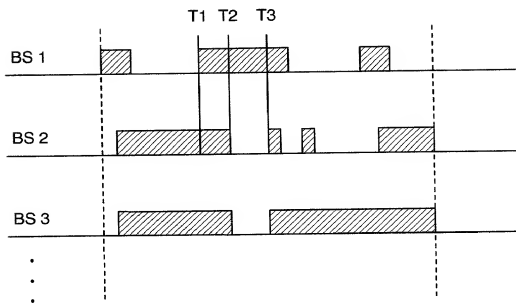


FIG. 27

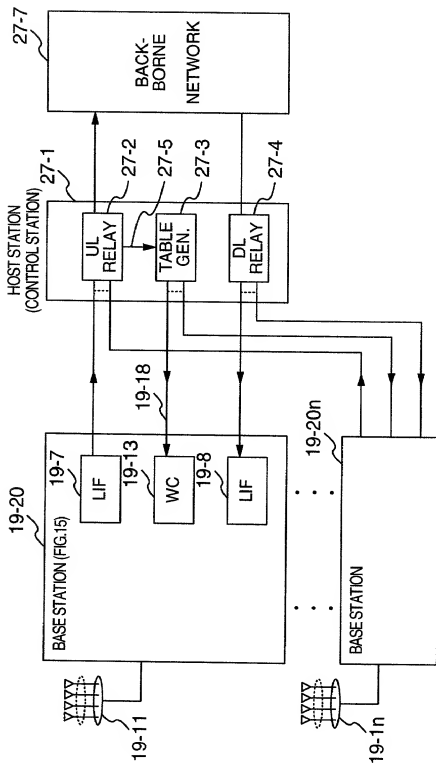


FIG.28

| TIME SLOT | BS1 | | | BS2 | | |
|--------------|-----------------|------------------|-----------------|-----------------|------------------|-----------------|
| | FIRST SECTOR | SECOND SECTOR | THIRD SECTOR | FIRST SECTOR | SECOND SECTOR | THIRD SECTOR |
| A FIG.4 | 330° | 90° | 210° | 60° | 180° | 300° |
| B FIG.5 | 60° | 180° | 300° | 330° | 90° | 210° |
| C FIG.6 | 30° | 150° | 270° | 0° | 120° | 240° |
| D FIG.7 | 0° | 120° | 240° | 30° | 150° | 270° |

FIG.29

| TIME SLOT | BS1 | | | BS2 | | |
|--------------|-----------------|------------------|-----------------|-----------------|------------------|-----------------|
| | FIRST SECTOR | SECOND SECTOR | THIRD SECTOR | FIRST SECTOR | SECOND SECTOR | THIRD SECTOR |
| A FIG.4 | 330° | 90° | 210° | 60° | 180° | 300° |
| B FIG.5 | 60° | 180° | 300° | 330° | 90° | 210° |
| C FIG.6 | 30° | 150° | 270° | 0° | 120° | 240° |
| D FIG.7 | 0° | 120° | 240° | 30° | 150° | 270° |
| E FIG.4 | 330° | 90° | 210° | 60° | 180° | 300° |
| F FIG.7 | 0° | 120° | 240° | 30° | 150° | 270° |

FIG.30
PRIOR ART

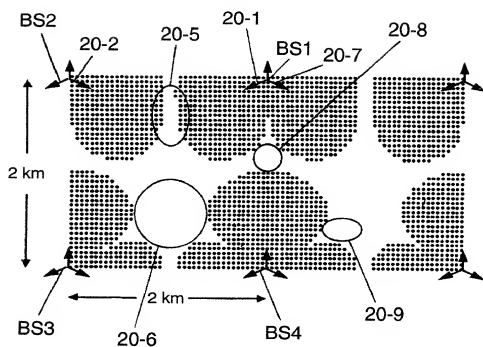


FIG.31
PRIOR ART

